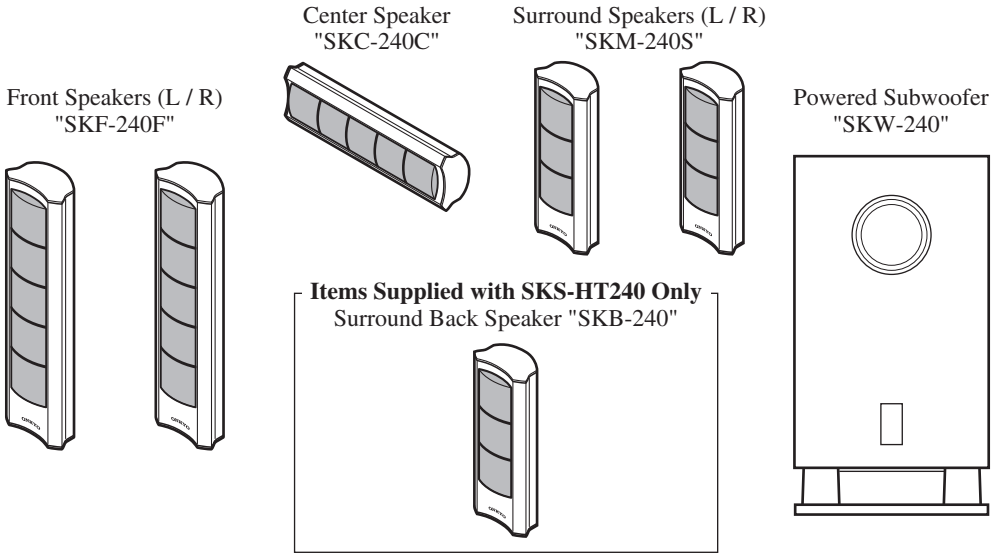
Ref. No. 3801
032004

# ONKYO SERVICE MANUAL

## 5.1-CH HOME THEATER SPEAKER PACKAGE
## MODEL HTP-240(S)

## 6.1-CH HOME THEATER SPEAKER PACKAGE
## MODEL SKS-HT240(S)




**Silver model**

| | |
|---|---|
| SCDD | 120 V AC, 60Hz |

### SAFETY-RELATED COMPONENT WARNING!!

**COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.**

**MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

ONKYO®
IMAGINATIVE SIGHT & SOUND

# SPECIFICATIONS

### Powered Subwoofer (SKW-240)

| | |
|---|---|
| Type : | Bass reflex with built-in power amplifier |
| Input sensitivity/impedance : | 220 mV / 15 k ohm |
| Maximum output power : | 150 W Dynamic |
| Frequency response : | 27 Hz - 150 Hz |
| SN ratio : | 70 dB |
| Cabinet capacity : | 38.5 L |
| Dimensions (W x H x D) : | 10-13/16" x 20-3/8" x 16-3/16" (275 x 518 x 411 mm) |
| Weight : | 30.9 lbs. (14 kg) |
| Drive unit : | 8" cone woofer |
| Power supply : | AC 120 V, 60 Hz |
| Power consumption : | 75 W |
| Other : | Auto Standby function |

### Center Speaker (SKC-240C)

| | |
|---|---|
| Type : | 2-way bass reflex center speaker |
| Impedance : | 8 ohm |
| Maximum input power : | 100 W |
| Output sound pressure level : | 82 dB/W/m |
| Frequency response : | 65 Hz - 35 kHz |
| Crossover frequency : | 5 kHz |
| Cabinet capacity : | 2.6 L |
| Dimensions (W x H x D) : | 17-5/16" x 5-1/8" x 3-9/16" (439 x 130 x 91 mm) |
| Weight : | 5.1 lbs. (2.3 kg) |
| Speaker : | 3-1/8" cone woofer x 2<br>1" balanced-dome tweeter |
| Other : | Magnetic shielding |

### Front Speaker (SKF-240F)

| | |
|---|---|
| Type : | 2-way bass reflex front speaker |
| Impedance : | 8 ohm |
| Maximum input power : | 100 W |
| Output sound pressure level : | 82 dB/W/m |
| Frequency response : | 55 Hz - 35 kHz |
| Crossover frequency : | 5 kHz |
| Cabinet capacity : | 3 L |
| Dimensions (W x H x D) : | 5-1/8" x 19-11/16" x 3-9/16" (130 x 500 x 91 mm) |
| Weight : | 5.5 lbs. (2.5 kg) |
| Drive unit : | 3-1/8" cone woofer x 2<br>1" balanced-dome tweeter |
| Other : | Magnetic shielding |

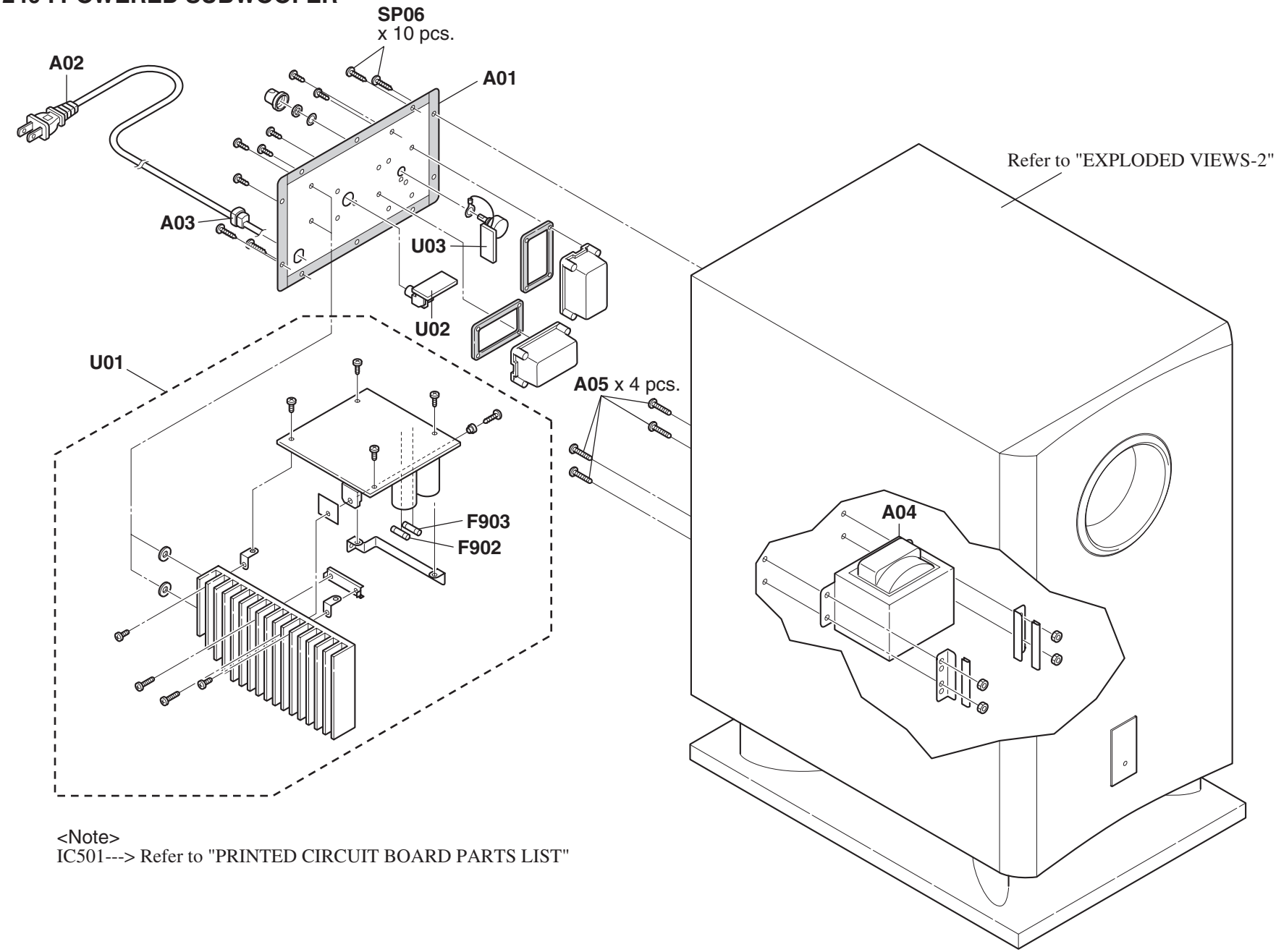
### Surround Speaker (SKM-240S/SKB-240)

| | |
|---|---|
| Type : | 2-way bass reflex surround/surround back speaker |
| Impedance : | 8 ohm |
| Maximum input power : | 100 W |
| Output sound pressure level : | 80 dB/W/m |
| Frequency response : | 65 Hz - 35 kHz |
| Crossover frequency : | 6.5 kHz |
| Cabinet capacity : | 2 L |
| Dimensions (W x H x D) : | 5-1/8" x 13-3/8" x 3-9/16" (130 x 340 x 91 mm) |
| Weight : | 3.5 lbs. (1.6 kg) |
| Speaker : | 3-1/8" cone woofer<br>1" balanced-dome tweeter |
| Other : | Magnetic shielding |

Specifications and appearance are subject to change without prior notice.

# EXPLODED VIEWS-1

## SKW-240 : POWERED SUBWOOFER

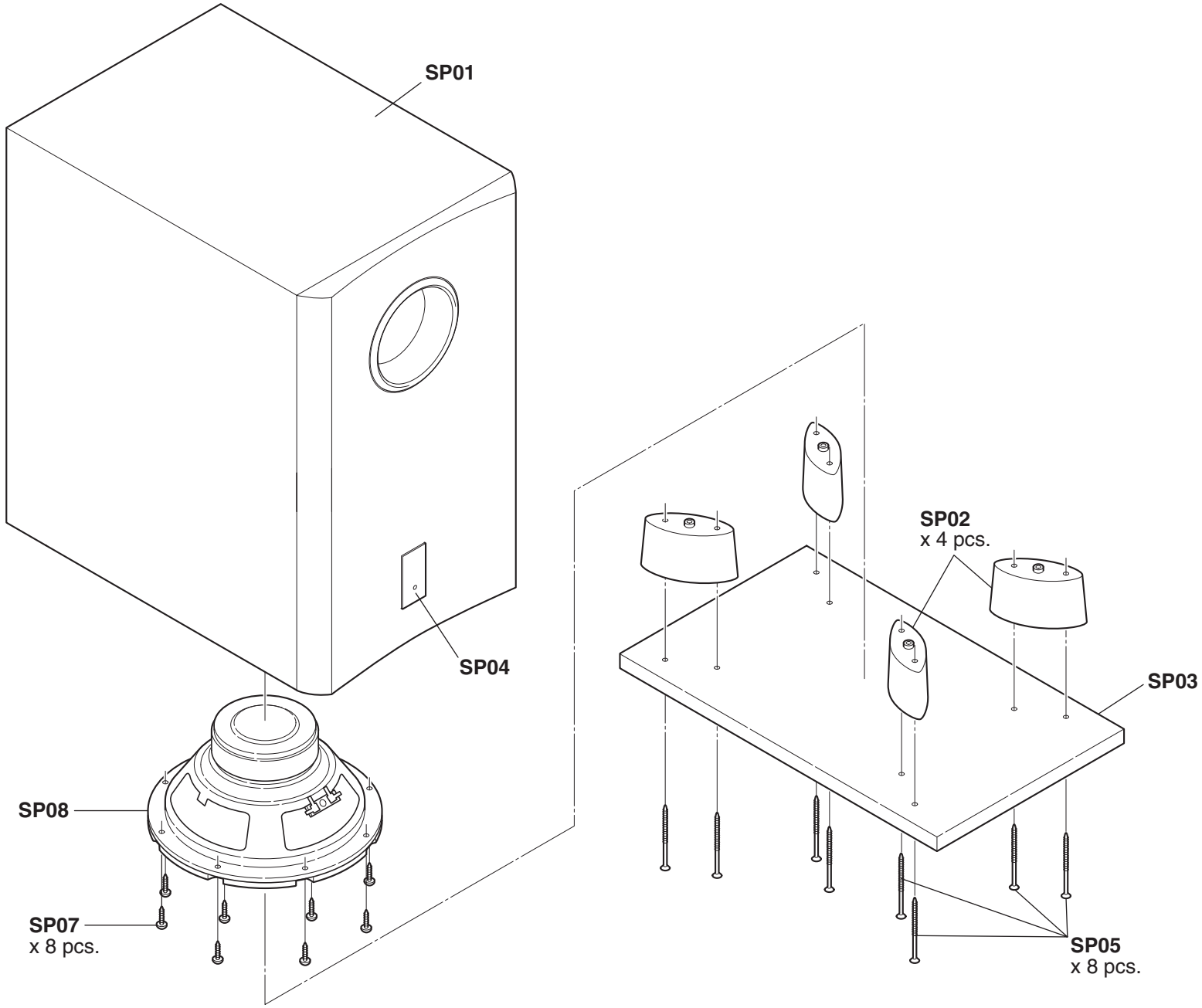



<Note>
IC501---> Refer to "PRINTED CIRCUIT BOARD PARTS LIST"

HTP-240/SKS-HT240

# EXPLODED VIEWS-2

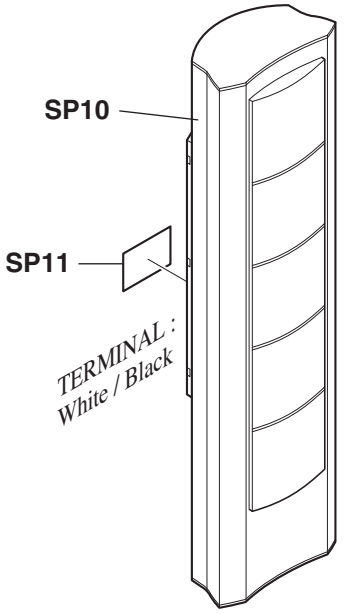
## SKW-240 : POWERED SUBWOOFER



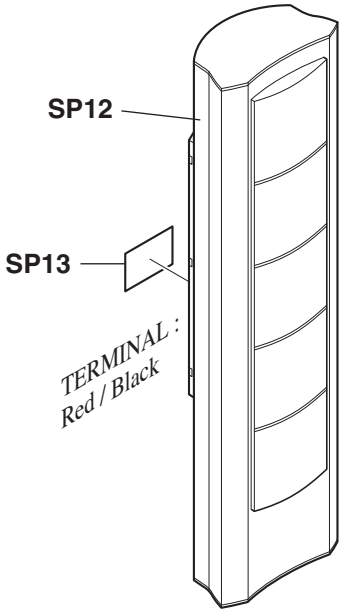

HTP-240/SKS-HT240

## EXPLODED VIEWS-3

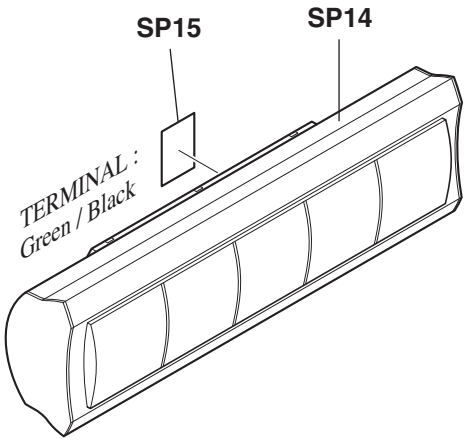
### SKF-240F / SKC-240C / SKM-240S / SKB-240



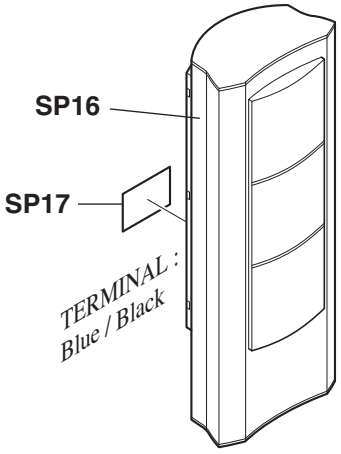

"SKF-240F (L)"



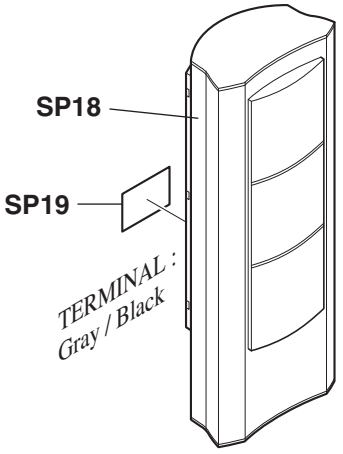

"SKF-240F (R)"



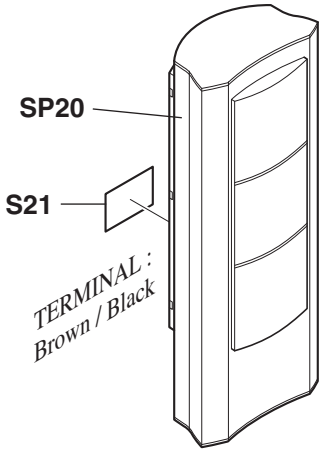

"SKC-240C"




"SKM-240S (L)"




"SKM-240S (R)"



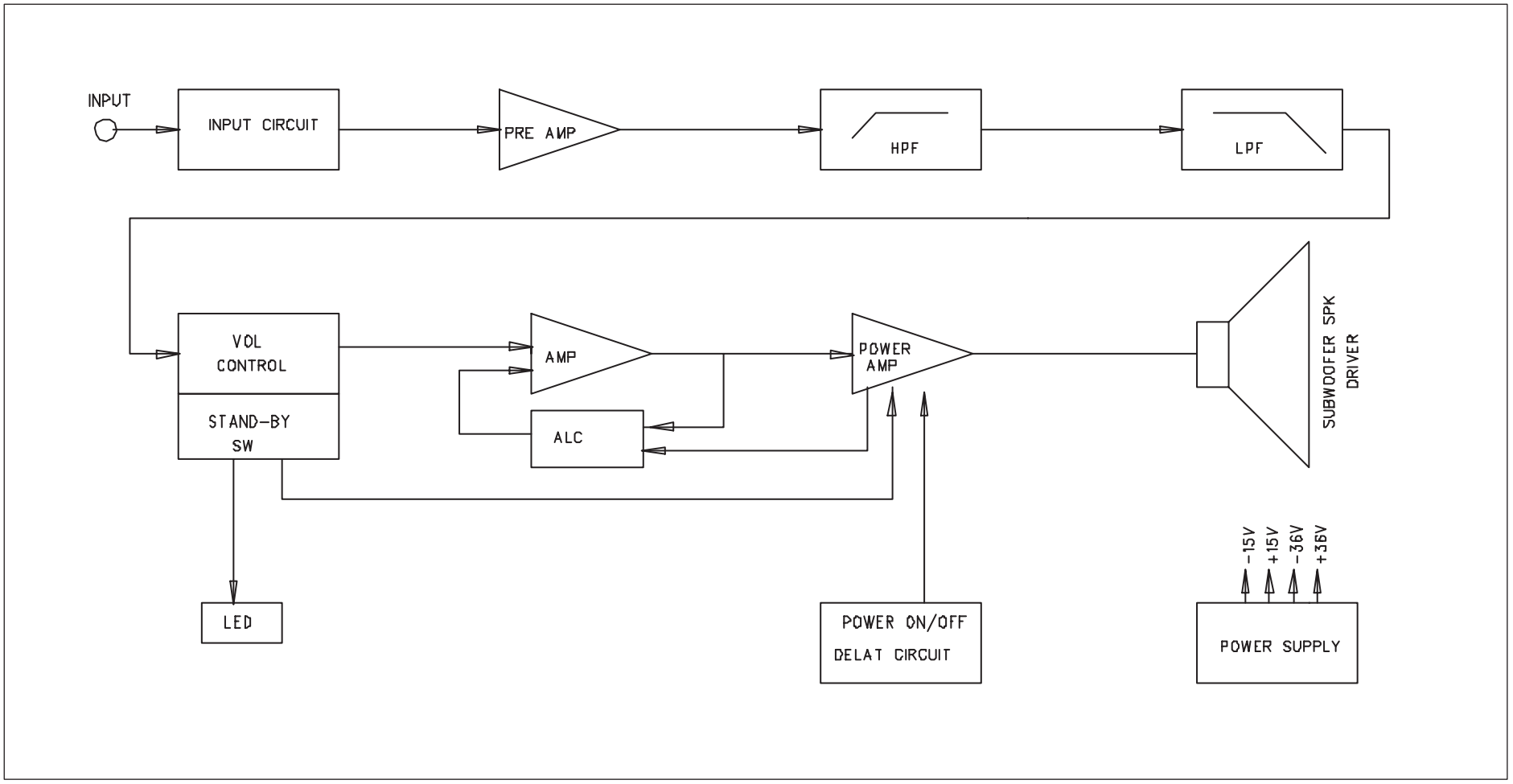

"SKB-240"

**"SKS-HT240" Only**

HTP-240/SKS-HT240

# BLOCK DIAGRAM

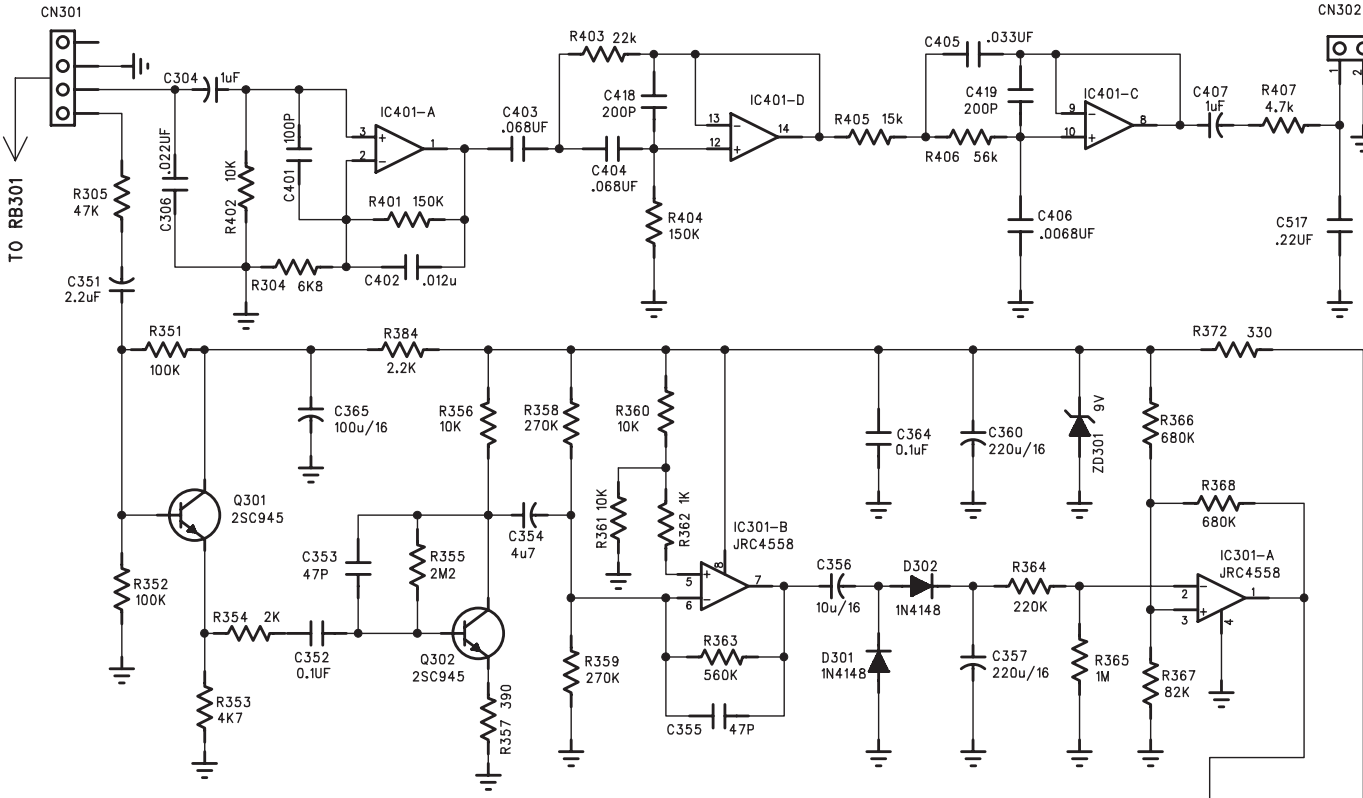
## SKW-240 : POWERED SUBWOOFER

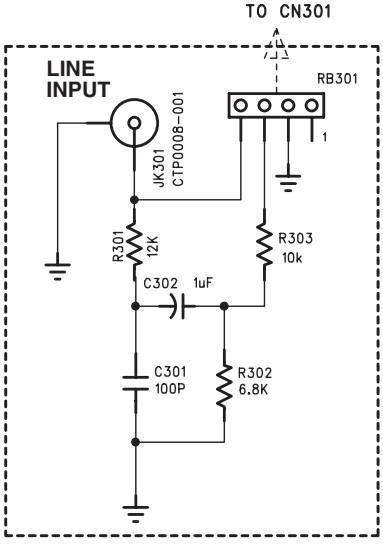



HTP-240/SKS-HT240

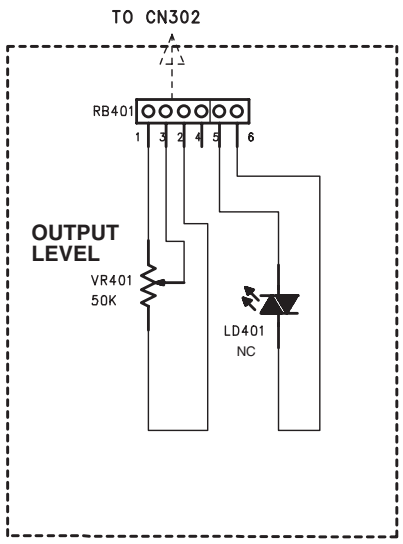
# SCHEMATIC DIAGRAM

## SKW-240 : POWERED SUBWOOFER

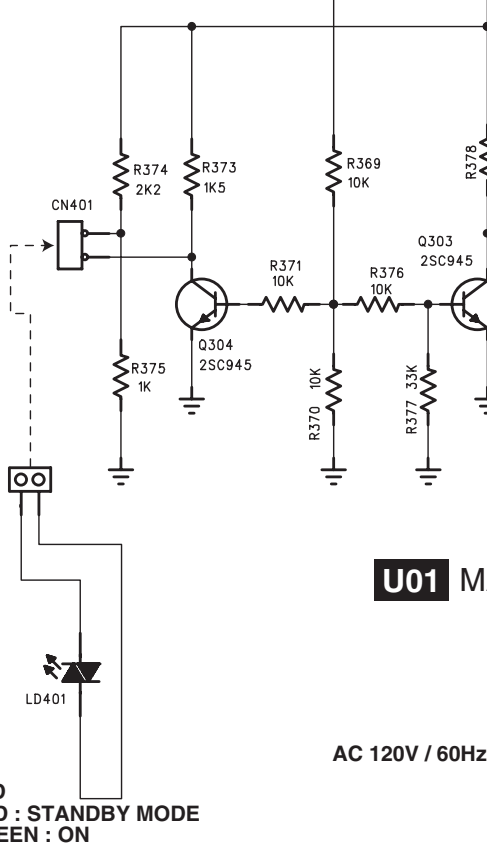



**U02** INPUT PC BOARD




**U03** VR / LED PC BOARD



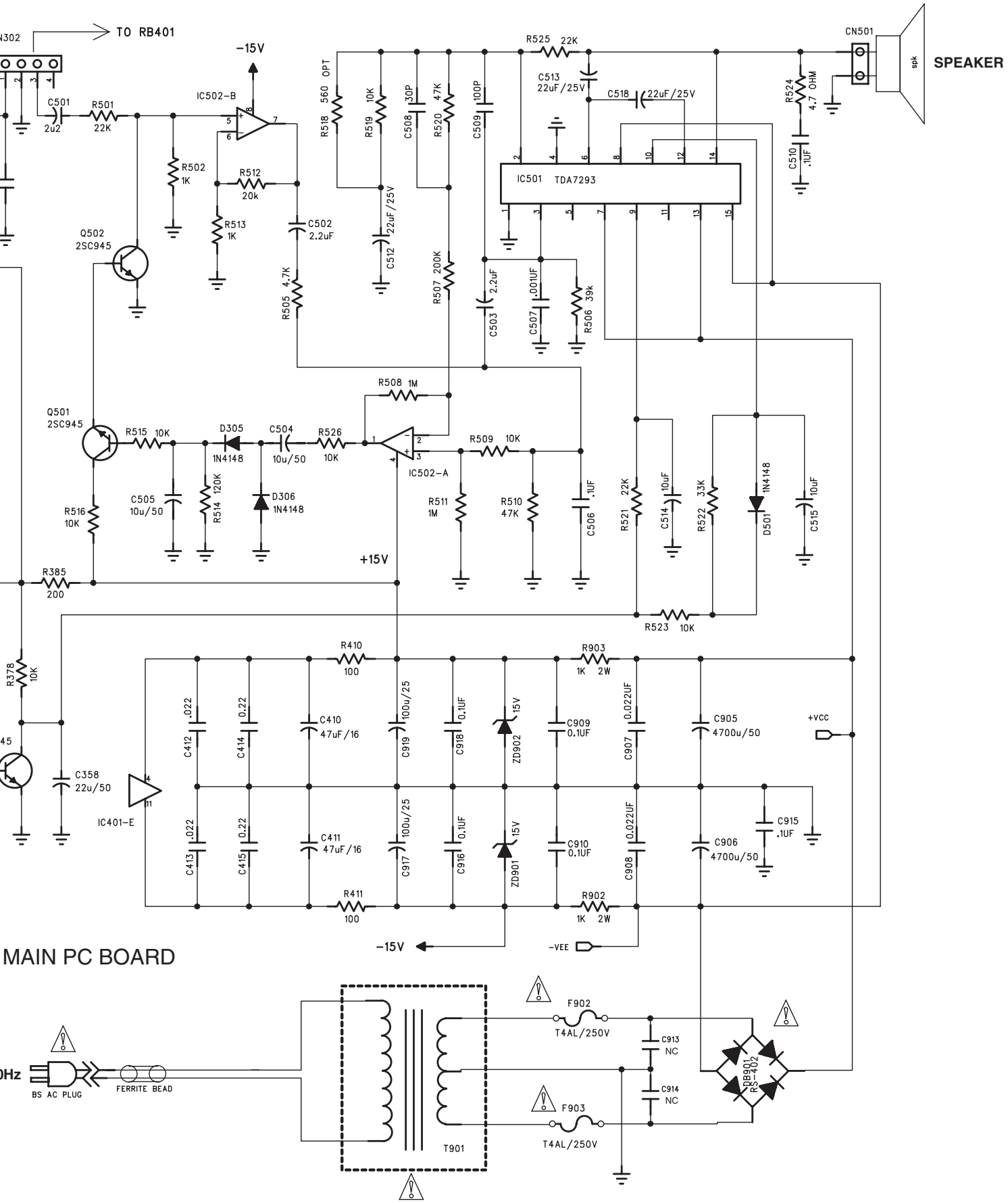

**U01** M

**AC 120V / 60Hz**

**LED**
**RED : STANDBY MODE**
**GREEN : ON**

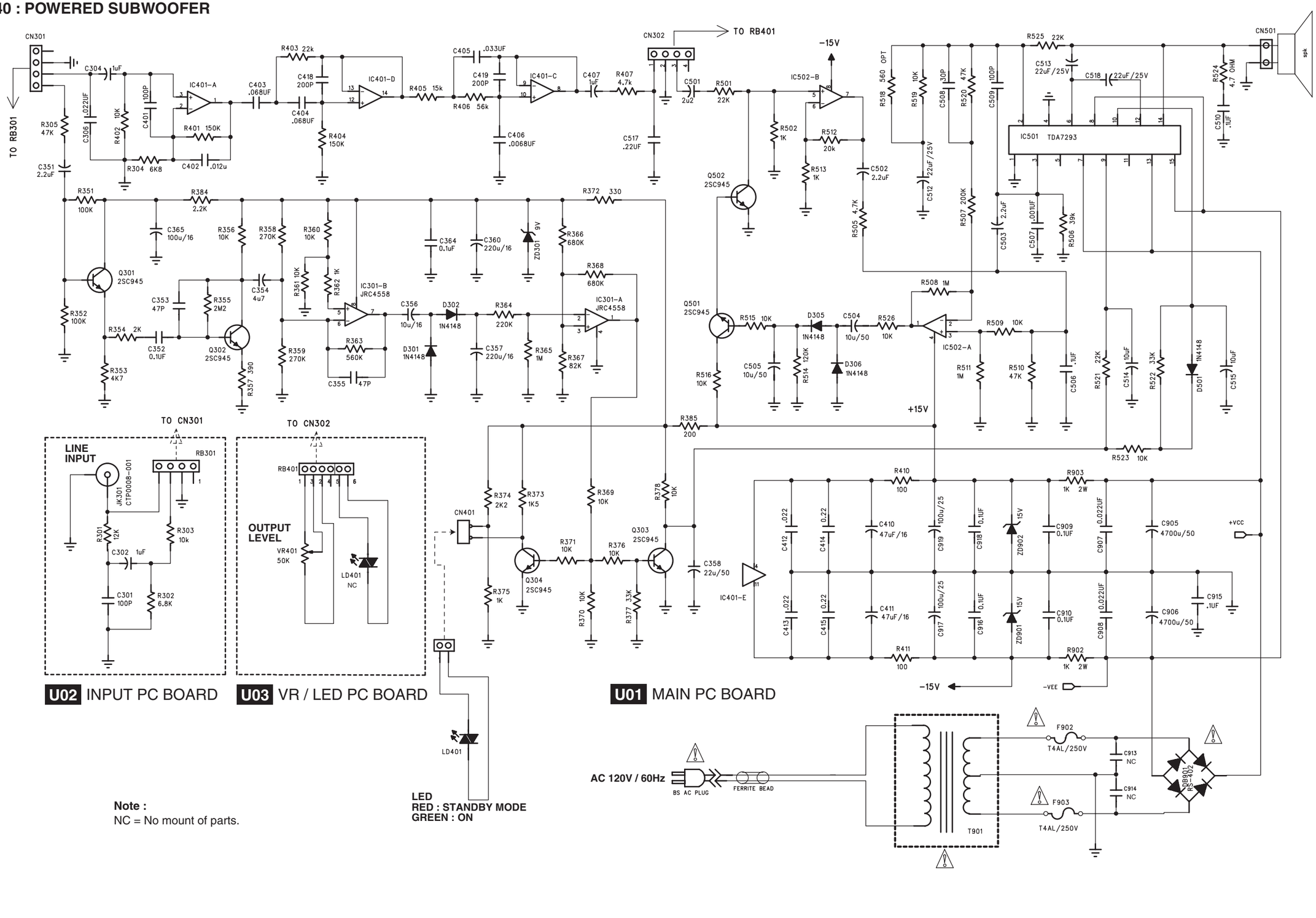
**Note :**
NC = No mount of parts.

E F G H


TO RB401
-15V
IC502-B
C501 2u2
R501 22K
R502 1K
R512 20k
R513 1K
Q502 2SC945
C502 2.2uF
R505 4.7K
R518 560 OPT
R519 10K
C508 30P
R520 4.7K
C509 100P
C512 22uF/25V
R507 200K
C503 2.2uF
C507 .001UF
R506 39k
R525 22K
C513 22uF/25V
C518 22uF/25V
IC501 TDA7293
R524 4.7 OHM
C510 .1UF
CN501
spk
SPEAKER
R508 1M
Q501 2SC945
R515 10K
D305 1N4148
C504 10u/50
R526 10K
IC502-A
R509 10K
R516 10K
C505 10u/50
R514 120K
D306 1N4148
R511 1M
R510 47K
C506 .1UF
R521 22K
C514 10uF
R522 33K
D501 1N4148
C515 10uF
+15V
R385 200
R523 10K
R378 10K
R410 100
R903 1K 2W
C412 .022
C414 0.22
C410 47uF/16
C919 100u/25
C918 0.1UF
ZD902 15V
C909 0.1UF
C907 0.022UF
C905 4700u/50
+VCC
C358 22u/50
IC401-E
C413 .022
C415 0.22
C411 47uF/16
C917 100u/25
C916 0.1UF
ZD901 15V
C910 0.1UF
C908 0.022UF
C906 4700u/50
C915 .1UF
R411 100
R902 1K 2W
-15V
-VEE
MAIN PC BOARD
F902 T4AL/250V
C913 NC
C914 NC
F903 T4AL/250V
DB901 RS-402
T901
BS AC PLUG
FERRITE BEAD

# SCHEMATIC DIAGRAM

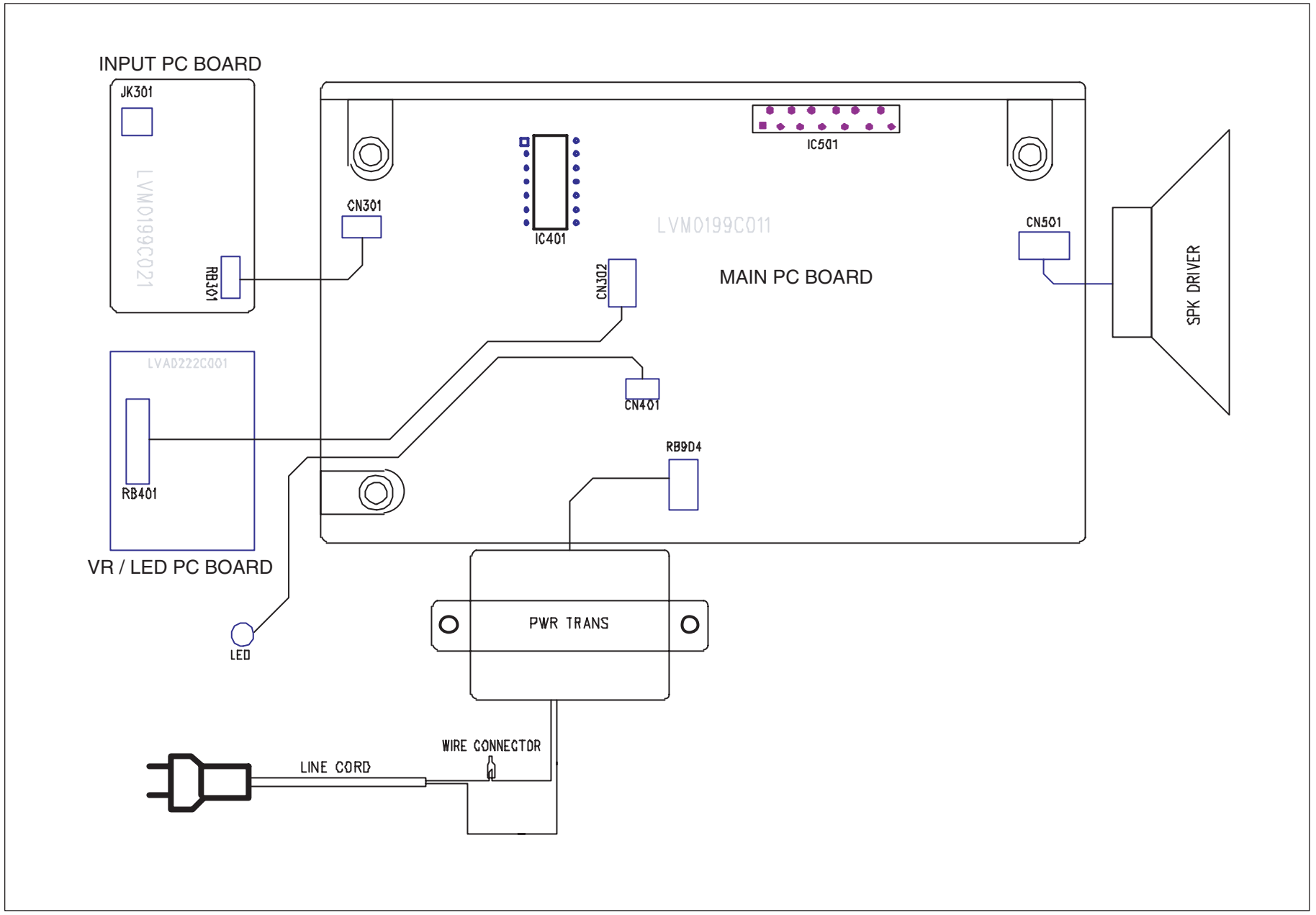
## SKW-240 : POWERED SUBWOOFER




**Note :**
NC = No mount of parts.

# PC BOARD CONNECTION DIAGRAM

## SKW-240 : POWERED SUBWOOFER

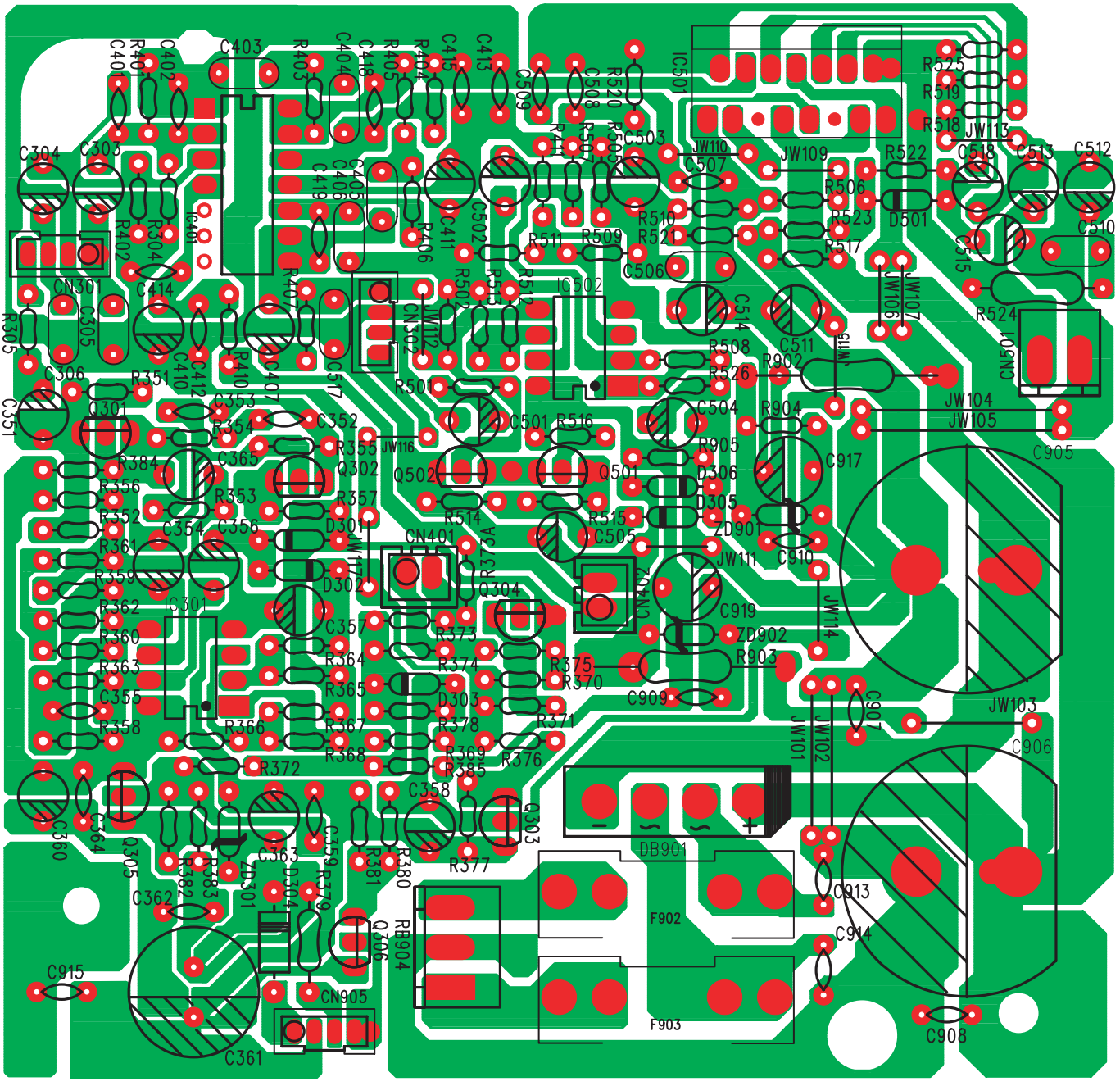



HTP-240/SKS-HT240

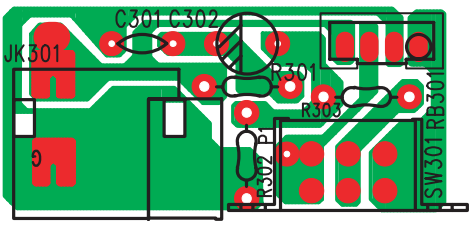
# PRINTED CIRCUIT BOARD VIEW

## SKW-240 : POWERED SUBWOOFER

### U01 MAIN PC BOARD




### U02 INPUT PC BOARD



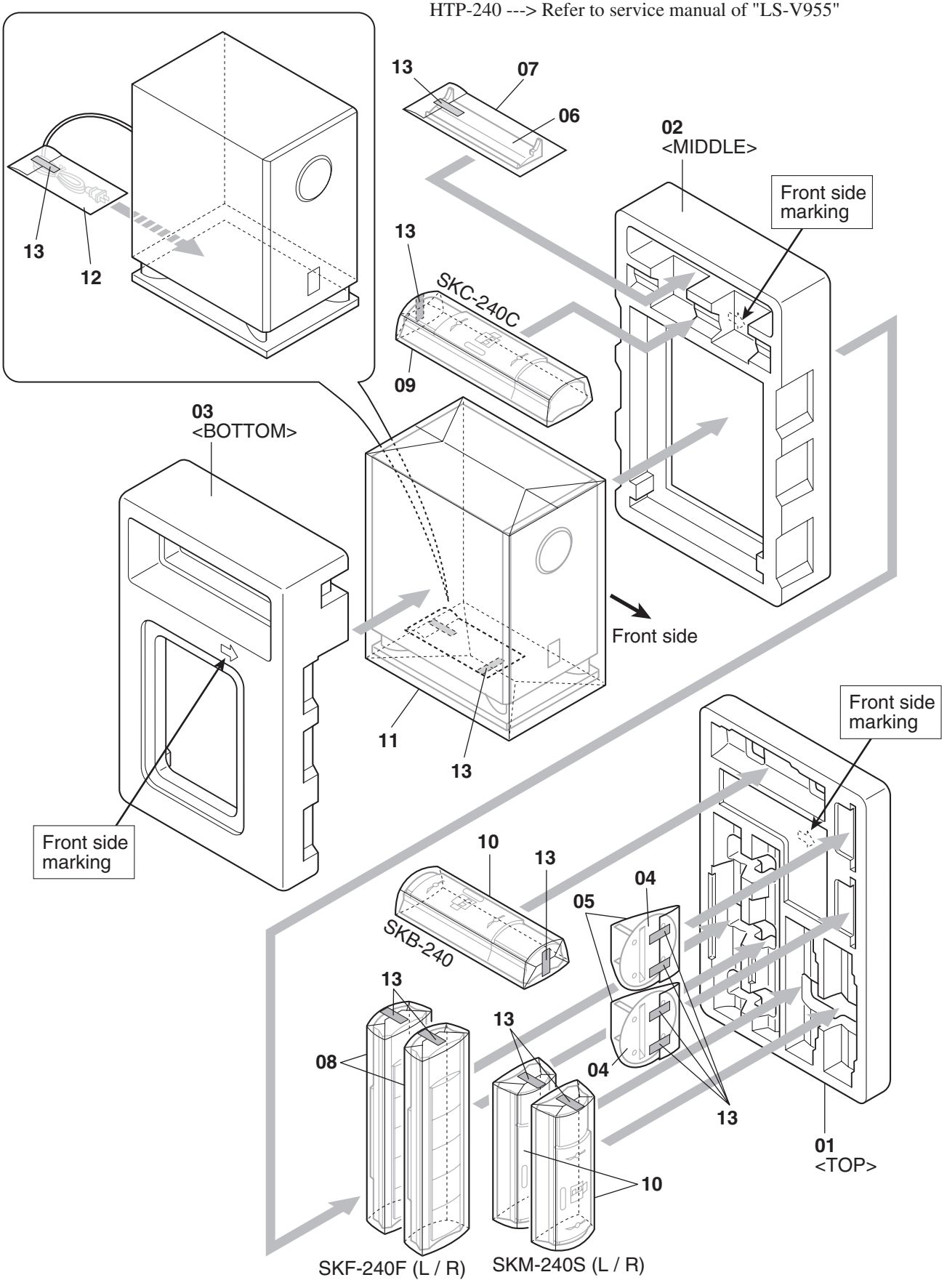

### U03 VR / LED PC BOARD

No PC board view
Look over the actual PC board on hand

# PACKING PROCEDURES-1

## SKS-HT240 Only

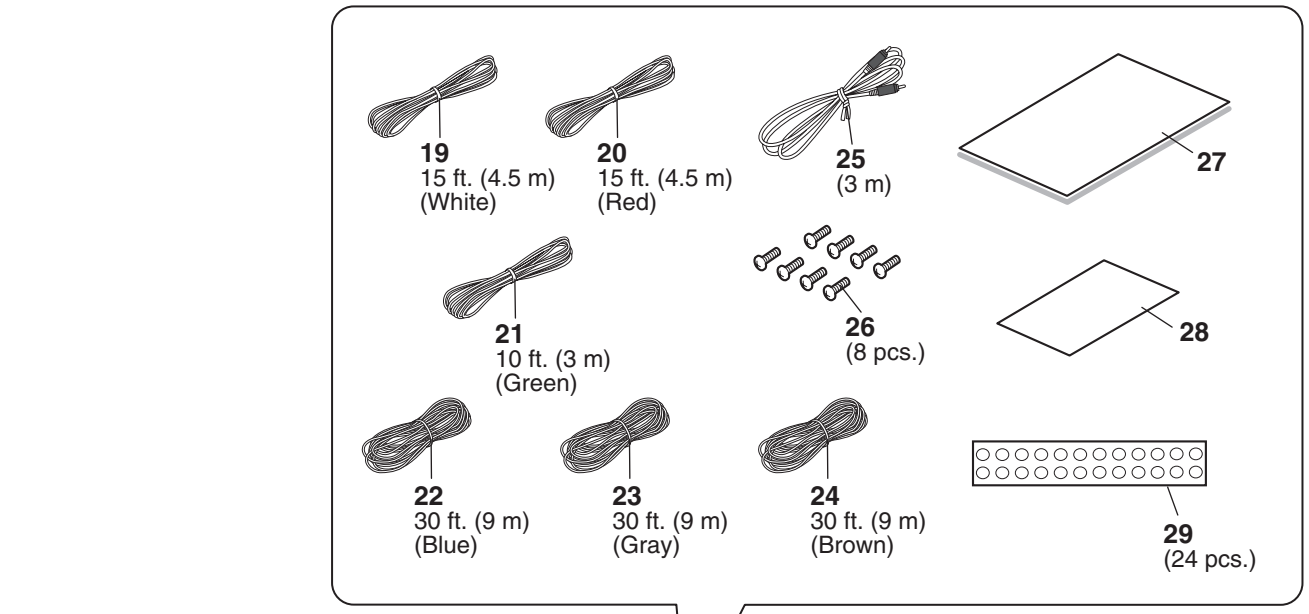
**<Note>**
HTP-240 ---> Refer to service manual of "LS-V955"

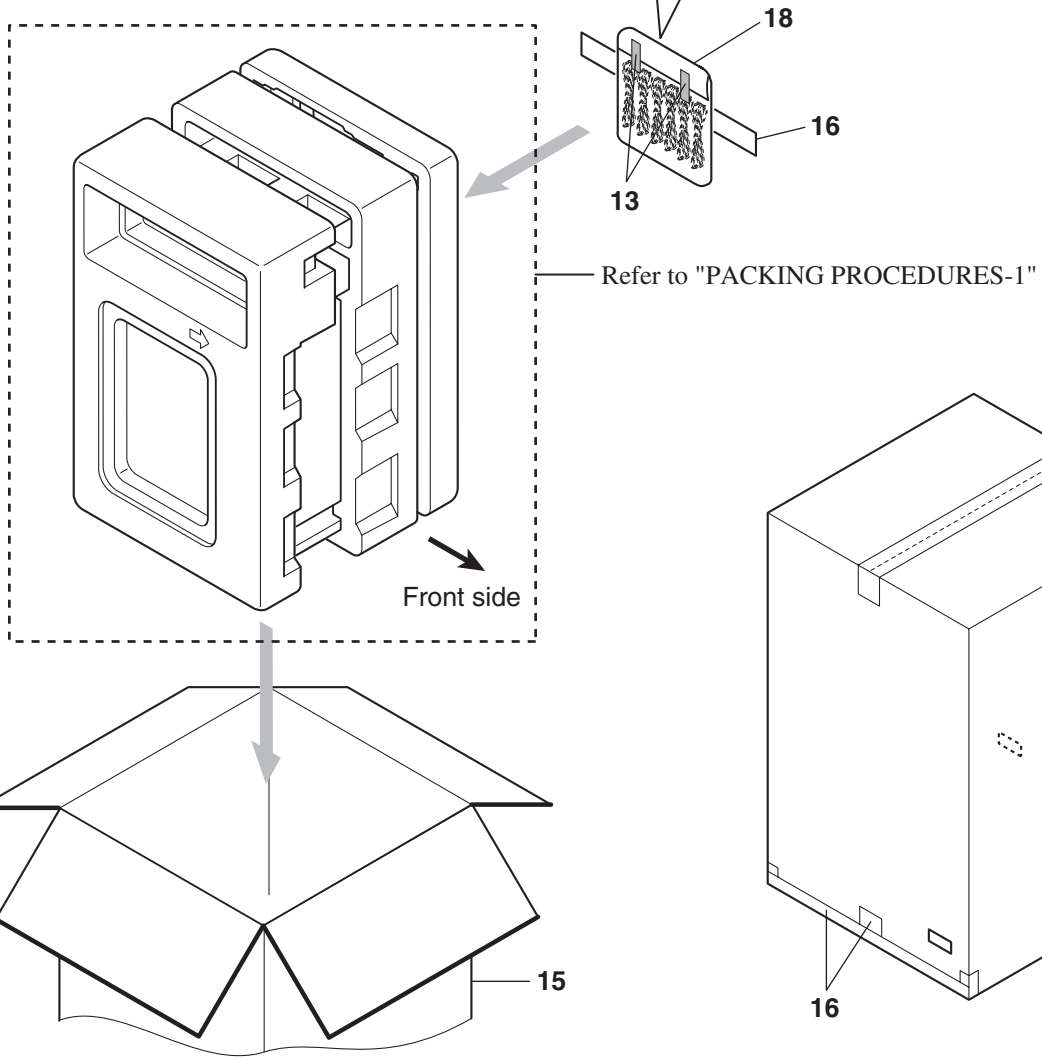


# PACKING PROCEDURES-2

## SKS-HT240 Only

**<Note>**
HTP-240 ---> Refer to service manual of "LS-V955"



# EXPLODED VIEW PARTS LIST

**NOTE : THE COMPONENTS IDENTIFIED BY THE MARK ! ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.**

| | REF. NO. | PART NAME | DESCRIPTION | Q'TY | PART NO. (SN) | MARK |
|---|---|---|---|---|---|---|
| EXPLODED | **SKW-240 : POWERED SUBWOOFER** | | | | | |
| EXPLODED | SP01 | CABINET ASS'Y | SKW-240 | 1 | EVM500240-0001 | |
| EXPLODED | SP02 | FOOT | D87.5 x D37.5 x H50 HIPS BLK | 4 | BPE8000040001 | |
| EXPLODED | SP03 | BOTTOM BOARD | L403 x W275 x T15mm | 1 | EVT5100021503 | |
| EXPLODED | SP04 | FRONT PLATE | SKW-240 / ONKYO | 1 | BPL5001090001 | |
| EXPLODED | SP05 | WOOD SCREW | (FOR LEG) | 8 | HSF1400913700 | |
| EXPLODED | SP06 | WOOD SCREW | (FOR AMPLIFIER) | 10 | NSR5400818141 | |
| EXPLODED | SP07 | WOOD SCREW | (FOR WOOFER DRIVER) | 8 | NSR5400818141 | |
| EXPLODED | SP08 | WOOFER SPK | 20cm | 1 | 20LA0EHC2044 | |
| EXPLODED | A01 | REAR PANEL | "SKW-240" SPCC 190 x 120 x T2.0mm | 1 | GSP1000470001 | |
| EXPLODED | A02 | AC CORD | LINE CORD 2P 1800mm BLK POLARIZE | 1 | VPA0040120010 | ! |
| EXPLODED | A03 | BUSHING | AC LINE BUSHING | 1 | DBU001002-0011 | ! |
| EXPLODED | A04 | POWER TRANSFORMER | 120V / 60Hz 100W SKW100 | 1 | TTI1120010120 | ! |
| EXPLODED | A05 | SCREW | M4.0 x P0.7 x L25mm (FOR TRANS) | 4 | HSD1431033250 | |
| EXPLODED | F902 | FUSE | 4A / 250V SLOW WALT | 1 | KSA0204000011 | ! |
| EXPLODED | F903 | FUSE | 4A / 250V SLOW WALT | 1 | KSA0204000011 | ! |
| EXPLODED | U01 | MAIN PC BOARD ASS'Y | MAIN PC BOARD ASS'Y | 1 | ABE101991-0019 | |
| EXPLODED | <Note> | | | | | |
| EXPLODED | U01 : MAIN PC BOARD ASS'Y = PCB BRACKET + HEAT SINK + ALL PARTS FOR MAIN PC BOARD | | | | | |
| EXPLODED | U02 | INPUT PC BOARD ASS'Y | INPUT PC BOARD ASS'Y | 1 | ABE101992-0019 | |
| EXPLODED | <Note> | | | | | |
| EXPLODED | U02 : INPUT PC BOARD ASS'Y = INPUT PC BOARD with RCA JACK + CORD ASS'Y | | | | | |
| EXPLODED | U03 | VR / LED PC BOARD ASS'Y | VR / LED PC BOARD ASS'Y | 1 | ABE100222-0003 | |
| EXPLODED | <Note> | | | | | |
| EXPLODED | U03 : VR / LED PC BOARD ASS'Y = VR / LED PC BOARD with VR / LED / CORD ASS'Y etc. | | | | | |
| EXPLODED | **SKF-240F : FRONT SPEAKERS (L / R)** | | | | | |
| EXPLODED | SP10 | COMPLETE UNIT | "SKF-240F (L)" | 1 | ASL5M0240BM00 | |
| EXPLODED | SP11 | BACK LABEL (L) | --- | 1 | YLB5101322001 | |
| EXPLODED | SP12 | COMPLETE UNIT | "SKF-240F (R)" | 1 | ASL5M0240BM01 | |
| EXPLODED | SP13 | BACK LABEL (R) | --- | 1 | YLB5101322002 | |
| EXPLODED | **SKC-240C : CENTER SPEAKER** | | | | | |
| EXPLODED | SP14 | COMPLETE UNIT | "SKC-240C" | 1 | ASL5C0240BM00 | |
| EXPLODED | SP15 | BACK LABEL | --- | 1 | YLB5101322003 | |
| EXPLODED | **SKM-240S : SURROUND SPEAKERS (L/R)** | | | | | |
| EXPLODED | SP16 | COMPLETE UNIT | "SKM-240S (L)" | 1 | ASL5U0240BM00 | |
| EXPLODED | SP17 | BACK LABEL (L) | --- | 1 | YLB5101322004 | |
| EXPLODED | SP18 | COMPLETE UNIT | "SKM-240S (R)" | 1 | ASL5U0240BM01 | |
| EXPLODED | SP19 | BACK LABEL (R) | --- | 1 | YLB5101322005 | |
| EXPLODED | **SKB-240 : SURROUND BACK SPEAKER** | | | | | |
| EXPLODED | SP20 | COMPLETE UNIT | "SKB-240" | 1 | ASL5U0240BM02 | |
| EXPLODED | SP21 | BACK LABEL | --- | 1 | YLB5101322006 | |

HTP-240/SKS-HT240

# PRINTED CIRCUIT BOARD PARTS LIST

| | CIRCUIT NO. | PART NAME | DESCRIPTION | Q'TY | PART NO. (SN) | MARK |
|---|---|---|---|---|---|---|
| PWB | IC501 | POWER IC | 15PIN TDA7293 | 1 | RHI007293-0001 | |
| PWB | DB901 | DIODE | RS402L 4A 100V | 1 | RHD0004020101 | ! |

HTP-240/SKS-HT240

# PACKING PROCEDURES PARTS LIST

**SKS-HT240 Only**

| | REF. NO. | PART NAME | DESCRIPTION | Q'TY | PART NO. (SN) | MARK |
|---|---|---|---|---|---|---|
| PACKING | 01 | TOP POLYFOAM | 820L x 515W x 80D | 1 | ITF5303780001 | |
| PACKING | 02 | MIDDLE POLYFOAM | 820L x 515W x 145D | 1 | ITF5303780003 | |
| PACKING | 03 | BOTTOM POLYFOAM | 820L x 515W x 200D | 1 | ITF5303780002 | |
| PACKING | 04 | SMALL STEEL BASE | (FOR SKF-240F) | 2 | DHS5030230001 | |
| PACKING | 05 | PE BAG | 290L x 260W x 0.025T (FOR SKF BASE) | 2 | IVA5020010190 | |
| PACKING | 06 | PLASTIC BASE | (FOR SKC-240C) | 1 | BP050007500AA | |
| PACKING | 07 | PE BAG | 380L x 150W x 0.025T (FOR SKC BASE) | 1 | IVA5020010180 | |
| PACKING | 08 | SOFT PE BAG | 630L x 240W x 0.025T (FOR SKF) | 2 | IVA5080080010 | |
| PACKING | 09 | SOFT PE BAG | 630L x 240W x 0.025T (FOR SKC) | 1 | IVA5080080020 | |
| PACKING | 10 | SOFT PE BAG | 630L x 240W x 0.025T (FOR SKM/SKB) | 3 | IVA5080080030 | |
| PACKING | 11 | POLY BAG | 1000L x 720W x T0.015 (FOR SKW) | 1 | IVA8031020008 | |
| PACKING | 12 | PE BAG | 250L x 180W x 0.025T | 1 | IVA5020010130 | |
| PACKING | 13 | TAPE | NITTO NO.29 W18 (Yellow) | (1) | 29110149 | |
| PACKING | 15 | CARTON BOX | SKS-HT240 | 1 | ICC5004250003 | |
| PACKING | 16 | PP TAPE | W50 | (1) | 29110071 or | |
| PACKING | 16 | PP TAPE | NITTO 3703 SUPER W50L100 | (1) | 29110176 | |
| PACKING | 18 | POLY BAG | 350 x 250 | 1 | 29100097-1A | |
| PACKING | 19 | SPEAKER CABLE | 18# L=4.5m WHITE / TRANSPARENT | 1 | VWS3111224500 | |
| PACKING | 20 | SPEAKER CABLE | 18# L=4.5m RED / TRANSPARENT | 1 | VWS3111224501 | |
| PACKING | 21 | SPEAKER CABLE | 18# L=3m GREEN / TRANSPARENT | 1 | VWS3111223000 | |
| PACKING | 22 | SPEAKER CABLE | 18# L=9m BLUE / TRANSPARENT | 1 | VWS3111229000 | |
| PACKING | 23 | SPEAKER CABLE | 18# L=9m GRAY / TRANSPARENT | 1 | VWS311122-001 | |
| PACKING | 24 | SPEAKER CABLE | 18# L=9m BROWN / TRANSPARENT | 1 | VWS3111229002 | |
| PACKING | 25 | RCA CABLE | MONO L=3m / BLACK | 1 | 2010197 | |
| PACKING | 26 | SCREW | 8.5 x M5 x 5.8L | 8 | NSP5441331050 | |
| PACKING | 27 | INSTRUCTION MANUAL | HTP-240 / SKS-HT240 | 1 | YOM5000010081 | |
| PACKING | 28 | WRNTY CARD | (ONKYO) | 1 | 29365090B | |
| PACKING | 29 | RUBBER FOOT | 7.8 x 1.0T x 24 pcs. | 1 | DUF5120010002 | |

PACKING <Note>

PACKING HTP-240 ---> Refer to service manual of "LS-V955"

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